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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,516	02/04/2002	Mark A. Handschy	50041-00014	8464
27313 7	590 12/22/2003		EXAMINER	
MARSH FISCHMANN & BREYFOGLE, LLP			THOMPSON, TIMOTHY J	
3151 S. VAUC SUITE 411	HN WAY		ART UNIT	PAPER NUMBER
AURORA, CO	AURORA, CO 80014		2873	

DATE MAILED: 12/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

		o K				
	Application No.	Applicant(s)				
	10/067,516	HANDSCHY ET AL.				
Office Action Summary	Examiner	Art Unit				
	Timothy J Thompson	2873				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the o	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period we Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	66(a). In no event, however, may a reply be tir within the statutory minimum of thirty (30) day ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed /s will be considered timely. It the mailing date of this communication. ED (35 U.S.C.§ 133).				
1) Responsive to communication(s) filed on 29 Se	eptember 2003.					
2a)⊠ This action is <b>FINAL</b> . 2b)□ This a	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 10-38 is/are pending in the application	1.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>10-22 and 36-38</u> is/are allowed.						
6)⊠ Claim(s) <u>23-25,29 and 30</u> is/are rejected.						
7) Claim(s) <u>26-28 and 31-35</u> is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>04 February 2002</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. §§ 119 and 120						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents	s have been received.					
<ul> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the prioring</li> <li>application from the International Bureau</li> </ul>	ity documents have been receive (PCT Rule 17.2(a)).	ed in this National Stage				
* See the attached detailed Office action for a list of the first since a specific reference was included in the first 37 CFR 1.78.	c priority under 35 U.S.C. § 119( t sentence of the specification of	e) (to a provisional application) r in an Application Data Sheet.				
<ul> <li>a) ☐ The translation of the foreign language provisional application has been received.</li> <li>14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.</li> </ul>						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal F	(PTO-413) Paper No(s) Patent Application (PTO-152)				

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 23, 24, 29, 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Huang et al.(U.S. Patent No. 5,467,146).

Regarding claim 23, Huang et al. discloses a microdisplav(fig 2, 30) that lies substantially in a plane(the plane running vertically across the page between the element 30 and the light source 16 of fig 2); a source of light(fig 2, 16) located proximate to the plane(fig 2 and the plane as indicated previously), the source being oriented to direct light up and away from the plane(fig 2 and the plane as indicated previously); and an optical element(fig 2, 21) located above the support

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plane in position to direct the light from the source of light toward the microdisplay, the optical element being substantially further away from the microdisplay than is the source of light(fig 2).

Regarding claim 24, Huang et al. discloses the optical element includes a reflector(fig 2, 21).

Regarding claim 29, Huang et al. discloses the microdisplay is a reflective microdisplay (fig 3).

Regarding claim 30, Huang et al. discloses a microdisplay(fig 2, 30) that lies substantially in a plane(the plane running vertically across the page between the element 30 and the light source 16 of fig 2); a source of light(fig 2, 16) located proximate to the plane(fig 2), the source being oriented to direct light up and away from the plane(fig 2 and the plane as indicated previously)and:an optical element located above the plane in position to direct the light from the source of light toward the microdisplay(fig 2, 21), the optical element being substantially further away from the microdisplay than is the source of light(fig 2), the optical element including a reflector(fig 2, 21); and optical elements positioned in a light path above the microdisplay(fig 2, 29), wherein the microdisplay is a reflective microdisplay(fig 3), wherein the optical elements are receptive of light reflected from the microdisplay, the optical elements directing the reflected light for viewing, and further wherein the reflector is positioned in the light path between the microdisplay and the optical elements(fig 2).

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al.(U.S. Patent No. 5,467,146) as applied to claim 24 above, and further in view of Aho et al.(U.S. Patent No. 4,874,228).

Regarding claim 25, Huang et al. does not specifically disclose the reflector is curved. However, Aho et al. discloses using a curved reflector(fig 7, 90) stating this provides for a uniform intensity reflected light(col 5, lines 25-30).

## Allowable Subject Matter

Claims 26-28, 31-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 10-22 and 36-38 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art taken either singularity or in combination fails to anticipate or fairly suggest the limitations of the independent claim, in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in independent claims 10, 15, 30, 36-38, with the allowable features being; the source of light located proximate to the support surface with the reflector spaced apart from the support surface; the source of light located within a distance of the microdisplay, the distance being less than the lateral extent of the generated image onm the micro display; or the source of light located proximate to the micro display with the source of light closer to the microdisplay than the reflector. Therefore claims 10-22 and 36-38 are allowed.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Thompson whose telephone number is (703) 305-0881. If the examiner can not be reached his supervisor, Georgia Epps, can be reached on (703) 308-4883. Application/Control Number: 10/067,516

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12/11/03

Georgia Epps Supervisory Patent Examiner Technology Center 2800

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